



State of North Carolina Cooperating Technical State Mapping Activity Statement

Agreement C—Digital Base Map Data for Six Eastern River Basins

In accordance with the Cooperating Technical State (CTS) Memorandum of Agreement dated September 15, 2000, between the State of North Carolina and the Federal Emergency Management Agency (FEMA), Agreement C is as follows:

1. **Objective and Scope:** The objective of this Mapping Activity is selection, acquisition, and preparation of the digital base map data that will be used in preparing Digital Flood Insurance Rate Maps (DFIRMs) for the counties and communities in the six eastern river basins in the State of North Carolina.

The digital base map sources will include USGS Digital Orthophoto Quarter Quadrangles (DOQs), locally produced data sets, and selected features from the North Carolina Corporate Geographic Database. This activity will also include identification of available locally produced base maps and assessment of whether the locally produced base maps meet FEMA's DFIRM specifications. Information regarding locally available base maps and data sets will be gathered through a "GIS Data Availability Survey" conducted concurrently with the Project Scoping conducted under Mapping Activity Statement A. The results of this survey will be documented in a database.

This activity will also include preparing the base maps for DFIRM production to be initiated under Mapping Activity Statement E. Base map preparation will entail determining tiling schemes (scale and paneling), integrating data from local sources into countywide coverages, redelineating hydrographic features, and adding appropriate labels (e.g., roads, streams, corporate limits).

This activity will also include generating metadata required by the National Geospatial Data Clearinghouse. Base map data will be documented using the Content Standards for Digital Geospatial Metadata, and the metadata will be served through the North Carolina Geographic Data Clearinghouse and the National Geospatial Data Clearinghouse.

2. **Period of Performance:** This Mapping Activity will begin in November 2000 and will be completed by September 30, 2002. This Mapping Activity may be terminated at the option of FEMA or the State of North Carolina in accordance with the provisions of the September 15, 2000, CTS Memorandum of Agreement.
3. **Funding/Cost-Sharing:** Funding will be in accordance with CTS Funding Agreement No. 1.
4. **Standards:** The following standards and resource documents are relevant to the evaluation of digital base map data and this Mapping Activity:

- *Base Map Standards for New Digital Flood Insurance Rate Map Product* (Draft, May 26, 1999). This document provides minimum base map standards for DFIRMs and includes the following requirements for base map data:
 - cover the community(s) or county(s) completely;
 - can be distributed by FEMA to the public;
 - meet the minimum accuracy requirements outlined in the document; and
 - include all required features.
 - Base maps will be tiled by the 10,000' x 10,000' State Plane grid tiling system for DFIRM production; scales for hardcopy DFIRM production will be 1"=1,000' or 1"=500'.
 - *Standards for Digital Orthophotos* (U.S. Geological Survey, National Mapping Program, December 1996).
 - *Content Standards for Digital Geospatial Metadata* (Federal Geographic Data Committee, 1998).
 - *Open GIS Web Server Specifications* (Open GIS Consortium).
5. **Products:** The State of North Carolina shall produce base maps ready for DFIRM production under Mapping Activity Statement E.
 6. **Schedule and Milestones:** This activity will be completed to allow the schedule and milestones established in Mapping Activity Statement E to be met.
 7. **Certification:** The State of North Carolina will ensure that the digital base map data selected for DFIRM production meet FEMA's minimum standards and specifications for DFIRMs.
 8. **Technical Assistance and Resources:** Updated DOQs and hydrographic data will be produced through partnering with the USGS. Specifically, the USGS will be asked to expedite completion of the production of DOQs based on 1998 aerial photography through the National Digital Orthophoto Program. The State will also work with the USGS to complete the joint effort to update the hydrographic data layer as part of the ongoing Surface Waters Project. These hydrographic data may be used to supplement existing hydrographic data outside of areas for which new flood hazard data are being developed under Mapping Activity Statement E.
- Additionally, through its Mapping Coordination Contractor, Dewberry & Davis LLC (MCC-D&D), FEMA will provide support in researching and evaluating available base maps and developing proposed tiling schemes (panel layout and scales) for DFIRM production. The MCC-D&D will develop a database to store the results of the GIS Data Availability Survey and will help populate the database. The MCC-D&D will also provide technical guidance regarding new or updated guidelines, standards, and requirements.
9. **Contractors:** Contractors may be used by the State of North Carolina to assist in the completion of the activity associated with this agreement. Contractors will be licensed to practice in the State of North Carolina as required by North Carolina General Statute 89C. Procurement of subcontractors using Federal funds provided as part of this Mapping Activity will comply with the requirements of 44 CFR 13.36 and NC G.S. 89C.

- 10. Quality Assurance/Quality Control (QA/QC) Procedures:** The State of North Carolina will perform internal QA/QC on its digital base map data before initiating DFIRM production.
- 11. Reporting:** Periodic reporting will be provided to the CTS Committee by the State of North Carolina for the purpose of review and approval.
- 12. Points of Contact:** The FEMA Project Manager is Laura Algeo, and the CTS Program Director is John Dorman, or subsequent personnel of comparable experience who are appointed to fulfill these responsibilities.

Each party has caused this Mapping Activity Statement to be executed by its duly authorized representatives.

John K. Dorman

John K. Dorman, Program Director
North Carolina Office of State Budget, Planning and Management

05/15/01

Date

Laura Algeo

Laura Algeo, Project Manager
Federal Emergency Management Agency

07/16/01

Date

Doug Bellomo

Doug Bellomo, Project Officer
Federal Emergency Management Agency

05/11/01

Date